

Summary of and Response to Comments Received

Legend

- Comment
- IDEM's Response

John Blair, Valley Watch

- Asthma rates in Evansville are five times those compared to Fort Wayne.
 - *Although ozone is a known asthma trigger, there are a number of other triggers for asthma as well. The Evansville Area clearly meets the federal health-based standard for ozone. The City of Fort Wayne is still in violation of the federal health-based standard for ozone and has been subject to ozone concentrations greater than those experienced in the Evansville Area for several years. Therefore, the asthma statistics referenced cannot be influenced solely by ozone concentrations.*
- Request that the public comment period be extended thirty days in order to provide time for evaluation of meteorological data.
 - *IDEM and the Ozone Officer for Vanderburgh County have conducted detailed analysis of meteorological data available for the years 1995 through 2004. These analyses have not found that the Evansville Area has benefited from unusually mild meteorology. More importantly, the analysis indicates a better correlation between reductions in ozone concentrations and permanent and enforceable precursor emission reductions. The 2005 critical value for the Evansville Area is .099 parts per million (PPM). A critical value represents the level that the fourth highest ozone value for the 2005 season would have to reach in order for a violation of the standard to occur. The .099 critical value for 2005 is a level that has never been registered at the controlling monitor (Yankeetown) since ozone has been measured under the 8-hour standard. It is unlikely that an extension of the comment period will yield new information to support a link between meteorology and attainment of the ozone standard. Additionally, should the comment period be extended, IDEM has been informed that there would be adverse consequences for planned transportation projects due to the June 15, 2005 deadline for a transportation conformity finding to be in place. The U. S. EPA, not IDEM, will make the decision whether to redesignate the Evansville Area to attainment under the 8-hour ozone standard. Once a final submittal is made, the U.S. EPA will solicit additional comments from interested parties. This will provide adequate time for data collection, analysis, and the compilation of additional comment prior to federal action being taken. Therefore, IDEM does not believe that an extension of the public comment period is necessary.*
- Request that IDEM not finalize the petition until ozone levels associated with the 2005 season can be evaluated.
 - *Once again, the 2005 critical value of .099 ppm is a value that has never been registered at the controlling monitor since ozone has been measured under the 8-hour standard. Therefore, it is extremely*

unlikely that the Evansville Area will violate the standard this year, or in the near future. Nevertheless, if unforeseeable backsliding were to occur in the future, the maintenance plan provides for prompt and sufficient action to protect local air quality and ensure that corrective actions are implemented to maintain ozone levels that are within the standard.

- US EPA set the standard at 80 parts per billion, not 85.
 - *The U.S. EPA established the 8-hour standard for ozone at .08 parts per million, as opposed to 80 or 85 parts per billion. Within the Guidelines On Data Handling Conventions For The 8-Hour Ozone NAAQS, published by the U.S. EPA in December of 1998, the U.S. EPA established parts per million (ppm) and three significant figures as the basis for computation of 8-hour ozone concentrations. In accordance with this guidance, three significant digits are used to determine an area's design value and for conducting attainment tests. Specifically, because the third decimal digit is rounded, 0.084 ppm is the largest concentration that is less than or equal to the standard of 0.08 ppm. Therefore, an ozone concentration equal to or greater than .085 ppm is considered to be above or in violation of the standard. The U.S. EPA established this methodology and uses this methodology along with all of the states to report and interpret ozone monitoring data. Furthermore, the U.S. EPA used this method for evaluating and designating areas under the standard in 2004.*
- Guidance issued by EPA states that an area cannot be redesignated as a result of unusual meteorology.
 - *IDEM and the Ozone Officer for Vanderburgh County have conducted detailed analysis of meteorological data available for the years 1995 through 2004. These analyses have not found that the Evansville area has benefited from unusually mild meteorology. More importantly, the research does indicate that reductions in ozone concentrations better correlate with permanent and enforceable precursor emission reductions.*
- EPA is looking at lowering the standard further. The area should not be redesignated to be designated nonattainment at a later date.
 - *The Area's eligibility for redesignation is solely based on the applicable standards of today. It is not known whether there will be a more stringent standard for ozone in the future, or at what level a new standard may be set. Therefore, it is not known whether the Evansville Area will or will not comply with an unidentified standard at some point in the future. Nevertheless, the implementation of the Clean Air Interstate Rule and continued phase-in of gasoline and diesel engine and fuel standards will further improve air quality into the future.*
- Due to NO_x scavenging, it is unclear whether the NO_x SIP call will benefit the area.
 - *The U.S. EPA and IDEM, through the Lake Michigan Air Directors Consortium, have conducted detailed photochemical modeling in association with the NO_x SIP Call and the Clean Air Interstate Rule. Current modeling depicts significant reductions of ozone in SW Indiana as a result of regional NO_x reductions. The U.S. EPA's most recent modeling in association with the Clean Air Interstate Rule shows an eleven parts per billion reduction of ozone from the 1999-2003 design value, resulting in an anticipated ozone concentration for the year 2010 of .070 parts per million. These reductions include NO_x*

reductions from the Clean Air Interstate Rule, as well as NO_x and volatile organic reductions from gasoline and diesel engine and fuel standards. Disbenefits associated with NO_x emission reductions only occur in major metropolitan areas (e.g., Chicago) that are more sensitive/responsive to reductions of volatile organic compounds. Local data has not demonstrated, nor have photochemical models predicted, the Evansville Area to be unresponsive to reductions of NO_x. Therefore, no disbenefits are likely to occur. In fact, since controls associated with the NO_x SIP call were in place at the beginning of the 2004 ozone season, if disbenefits were likely, notable adverse trends in ozone values should have occurred. However, opposite and favorable trends in ozone concentrations have occurred.

- No federally enforceable action has been taken to improve air quality.
 - *All actions that have been taken to improve air quality in the Evansville Area and other parts of Indiana are in fact federally enforceable. As noted in the redesignation petition, the NO_x SIP Call and Tier II engine and low sulfur gasoline standards account for the majority of the emission reductions that have occurred in recent years. These measures are indeed permanent and federally enforceable actions. In addition to these critical measures, a number of Nationally Enforceable Standards for Hazardous Air Pollutants (NESHAPs) have been incorporated into state law, and new federal engine and fuel standards have been established for onroad and off-road diesel-fueled vehicles and equipment. These measures are also federally enforceable and will be phased in over the next several years, with implementation already underway.*
- Kentucky has issued a permit for a new power plant that will worsen area air quality.
 - *IDEM has not been informed that such a permit has been issued. However, with the NO_x SIP Call and Clean Air Interstate Rules being in place and setting enforceable caps for NO_x emissions, regional air quality is not expected decline.*
- If the new state administration supports more power plants in SW Indiana, air quality will worsen.
 - *IDEM is not aware of any plans for major development in SW Indiana, including the construction of new electric generating units. However, if an entity applies for the required permit in the future, the facility's potential to emit must fit within the existing budget for NO_x. Also, IDEM will conduct the necessary evaluation to ensure that the area's air quality will not be jeopardized and continued compliance with the National Ambient Air Quality Standards is assured. Furthermore, the Clean Air Interstate Rule will establish more stringent permanent emission caps for NO_x and sulfur dioxide, which will result in additional regional emission reductions and prevent emission increases from the power generating industry.*
- Redesignation will allow for more pollution and take away protection from the Clean Air Act.
 - *The maintenance plan has been drafted to comply with Clean Air Act requirements and ensure that there is a mechanism in place to keep precursor emissions at levels equal to or less than they were at the time the area complied with the standard. Nonetheless, if unforeseeable backsliding were to occur in the future, the maintenance plan provides for prompt and sufficient action to protect local air*

quality and ensure that corrective actions are implemented to maintain ozone levels that are within the standard.

Jim Daniels, Izaak Walton League

- The standard is 80, not 85, so I agree with Mr. Blair's arguments.
 - *Within the Guidelines On Data Handling Conventions For The 8-Hour Ozone NAAQS, published by the U.S. EPA in December of 1998, the U.S. EPA established parts per million (ppm) and three significant figures as the basis for computation of 8-hour ozone concentrations. In accordance with this guidance, three significant digits are used to determine an area's design value and for conducting attainment tests. Specifically, because the third decimal digit is rounded, 0.084 ppm is the largest concentration that is less than or equal to the standard of 0.08 ppm. Therefore, an ozone concentration equal to or greater than .085 parts per million is considered to be above or in violation of the standard. The U.S. EPA established this methodology and uses this methodology along with all of the states to report and interpret ozone monitoring data. Furthermore, the U.S. EPA used this method for evaluating and designating areas under the standard in 2004. There were a number of areas in the country that were designated attainment under the standard that maintained a design value greater than that of the Evansville area today.*
- The area benefited from an unusually mild summer, not from emission reductions.
 - *IDEM and the Ozone Officer for VanderburghCounty have conducted detailed analysis of meteorological data available for the years 1995 through 2004. These analyses have not found that the Evansville area has benefited from unusually mild meteorology. More importantly, the research does indicate that reductions in ozone concentrations better correlate with permanent and enforceable precursor emission reductions.*
- The goal of regulators should be zero levels of ozone.
 - *IDEM is supportive of air quality standards that are protective of human health. The health effects research does not indicate that achieving zero ppm of ozone has any health benefit. In addition, some of the precursor emissions that form ozone come from natural sources such as plants, trees and wild fires, so zero is an unachievable goal.*
- I request an extension of the comment period to review the materials further and make sure that the area has not simply benefited from good weather.
 - *IDEM and the Ozone Officer for VanderburghCounty have conducted detailed analysis of meteorological data available for the years 1995 through 2004. These research efforts have failed to conclude that the Evansville Area has benefited from unusually mild meteorology. More importantly, the research does indicate that reductions in ozone concentrations better correlate with permanent and enforceable precursor emission reductions. The 2005 critical value for the Evansville Area is .099 parts per million (PPM). A critical value represents the level that the fourth highest ozone value for the 2005 season would have to reach in order for a violation of the standard to occur. The .099 critical value for 2005 is a level that has never been registered at the controlling monitor (Yankeetown) since ozone has*

been measured under the 8-hour standard. Based on the availability of meteorological, monitoring, and emissions data, and the results of research efforts to date, there does not appear to be a justifiable need to extend the comment period. Additionally, should the comment period be extended, IDEM has been informed that there would be adverse consequences for planned transportation projects due to the June 15, 2005 deadline for a transportation conformity finding to be in place. IDEM will not finalize the documents for final submittal for at least thirty days from the public hearing, and U.S. EPA will solicit public comment prior to taking action on the submittal. This will provide adequate additional time to collect and review additional information, and provide additional comment to the U.S. EPA prior to action being taken. Therefore, IDEM does not believe that an extension of the public comment period is necessary.

Joanne Alexandrovich, Vanderburgh County Health Department

- The petition meets Clean Air Act requirements and is consistent with US EPA guidance.
- Air quality has been improving within the region for years.
- In the early 1990's, ozone decreased because emissions dropped as the result of new motor vehicle engine standards.
- In the late 1990's ozone levels were further reduced by NO x reductions required by the Acid Rain Program.
- Most recently, ozone levels are down further due to phase II of the Acid Rain Program and the NO x SIP Call.
- New violations of the standard are not expected because of Tier 2 Engine and Fuel Standards, heavy-duty and off-road diesel rules, and the Clean Air Interstate Rule.
- Formation of ozone within the region is limited by NO x, thus NO x must be reduced to reduce ozone. The documented reductions of NO x within the region substantiate the reductions of ozone and the regions clean air.
- In the nonattainment area from 1999 to 2002, VOC emissions are down by 1700 tons and NO x emissions are down by 1900 tons per year (according to the National Emissions Inventory).
- There are seventeen coal-fired power plants within sixty-two miles of Vanderburgh County. Between 1999 and 2002, these plants reduced NO x emissions by almost 83,000 tons per year. From 2002 to 2004, these plants reduced NO x emissions by an additional 65,000 tons per year. These reductions have improved air quality.
- The City of Evansville and County of Vanderburgh enforce local air pollution control ordinances and implement an "Ozone Alert" voluntary episodic reduction program. Due to local enforcement, we are assured that business and industry minimize emissions.
- I request that information concerning the local ordinances and voluntary programs be included in Section 6.4 of the petition.
 - *The local air quality ordinances and voluntary programs are very important and should be referenced in the maintenance plan. However, since these do not represent permanent and enforceable controls under federal or state authority, IDEM wants to make sure that the inclusion of these measures does not create confusion.*

Therefore, a new section titled 6.7 "Local Air Quality Mitigation" has been added to the document.

- The petition adequately demonstrates that permanent and enforceable emission reductions have been achieved and will be maintained.
- It is my contention that ozone values have not been influenced by favorable meteorology.
- I concur with IDEM's conclusion that lower ozone values correspond to lowered local and regional ozone precursor emissions.
- Based on research of 1995 through 2005 data, the meteorology associated with 2004 ozone season appears to be fairly average.
- Based on a detailed analysis of historic weather conditions, recent ozone levels reflect emission reductions rather than favorable meteorology.
- Several typographical errors are noted.
 - *So noted, and appropriate corrections have been made.*
- IDEM is urged to submit the petition and maintenance plan to US EPA quickly, and no later than July 1, 2005.

Dona Bergman, City of Evansville EPA

- A nonattainment designation adversely affects the area economically and environmentally.
- A nonattainment designation applied inconsistently geographically actually causes further harm to air quality from a regional perspective because growth does not respect nonattainment/county lines, urban sprawl is encouraged and farm land is lost.
- The NO_x SIP Call and the associated control equipment has reduced emissions by 52% from 1999 NO_x levels.
- By the fall of 2004, air quality in the Evansville Area met the ozone standard because of new NO_x controls.
- The research done by state and local officials demonstrates that the area has attained the standard based on permanent and enforceable emission reductions.
- The area should benefit further by new NESHAP regulations, the Clean Air Interstate Rule, and new engine and fuel standards.
- The Evansville EPA was established to improve and protect air quality, and will continue to do so.

Don Faulkner, Cinergy

- Significant reductions of NO_x have been achieved as a result of the NO_x SIP Call.
- These NO_x reductions have reduced ozone in SW Indiana.
- The Clean Air Interstate rule will further improve air quality in SW Indiana.
- The Gibson station has implemented a number of changes that have benefited regional air quality and Cinergy has made significant financial commitments to achieve this.
- Cinergy has and will continue to do its share to improve Indiana air quality.